

REMARKS

Claims 1, 27, 28, 38, 33, 34, 39, 48, 49, 52, 53, 56, 68, and 80 have been amended to further clarify the Applicant's composition. Claim 82 has been amended to correct a typographical error. No new matter has been added, and no new issues have been raised by the amendments.

Claims 1-21, 23-24, 26-57 and 68-83 are pending. Claims 9, 13, 14, 23, 24, 29, 32-55 and 77 have been withdrawn from consideration. Claims 1-8, 10-12, 15-21, 26-28, 30-31, 56-57, 68-76 and 78-83 have been rejected.

Objections

Claim 82 has been objected to as being in improper dependent form (see page 4 of Office Action). Applicants have amended claim 82 to depend from claim 68. Applicants respectfully request withdrawal of this objection.

Rejections under 35 U.S.C. § 112, second paragraph

Claims 1-8, 10-12, 15-21, 26-28, 30-31, 68-76 and 78-82 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite (see page 5 of the Office Action). Claims 68-76 and 78-82 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite (see page 5 of the Office Action). Claims 1 and 68 are independent.

Applicants have amended claim 1 and 68 to remove the term "based." In addition, Applicants have amended claim 1 to remove the term "hard." The term "hard" is not present in independent claim 68. The Examiner suggested that Applicants rewrite claim 68 if the intention is not to limit the scope of the claims. Applicants have amended claim 68 to comply with the Examiner's suggestions. Applicants respectfully request reconsideration and withdrawal of these rejections.

Rejections under 35 U.S.C. §§ 102 (b) and 103(a)

Claims 1-2, 4-6, 18-19, 56-57 and 83 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Clabburn et al (WO 02/39183 A1) ("Clabburn"). Claims 1-2, 4-8, 10,

18-19, 56-57, 68-69, 71-76, 78-79 and 83 have been rejected under 35 U.S.C. § 103(a) as being anticipated by Ojeda et al (U.S. Pat. No. 6,326,072) (“Ojeda”). Claims 1-2, 7 and 18-21 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Ibata et al (U.S. Pat. No. 4,006,024) (“Ibata”). Claims 1-2, 4, 6, 10, and 18-21 been rejected under 35 U.S.C. § 102(b) as being anticipated by Duecker et al (U.S. Pat. No. 5,881,194) (“Duecker”). Claims 1-2, 4-8, 10-12, 15-21, and 56-57 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Duecker. Claims 1-2, and 6 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Ibata as evidenced by Handbook or Painted Raw Materials. Claims 1-2, 4, 6-8, 10-12, 15-21, 56-57 and 83 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Lin et al (U.S. Pat. No. 6,420,451) (“Lin”) as evidenced by Sartomer Application Bulletin. Claims 1-2, 4-8, 10, 18-21, 56-57 and 83 have been rejected 35 under U.S.C. § 103(a) as being unpatentable over Johnson et al (6,120,946) (“Johnson”) in view of Sartomer Application Bulletin: SN-980 Aliphatic High Speed Urethane Acrylate and RN 189146-15-4 and RN 41484-35-9. Finally, claims 1-2, 4, 6-8, 10, and 18-21 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Chawla et al (WO 00/20517) (“Chawla”). Handbook or Painted Raw Materials, Sartomer Application Bulletin, and Sartomer Application Bulletin: SN-980 Aliphatic High Speed Urethane Acrylate and RN 189146-15-4 and RN 41484-35-9 are referred to here as “the Cited References”. See the Office Action at pages 2-16. Claims 1 and 56 are independent.

The Examiner also indicated that “applicants on page 11, lines 13-20, or their original specification disclose that the second urethane acrylate oligomer can be the same or different from the first urethane acrylate.” Page 7 of the Office Action. This position is not consistent with Applicants amendment and remarks filed July 7, 2005, where Applicants introduced the phrase “second urethane acrylate oligomer” into independent claims 1 and 56, as a second urethane acrylate oligomer. Applicants have now included the phrase “different from the first urethane acrylate oligomer” to clarify the previous amendment.

Applicants have discovered a liquid stereolithography resin including a first urethane acrylate oligomer, a first acrylate monomer, a polymerization modifier, a second urethane acrylate oligomer, and a stabilizer, in which the first urethane acrylate oligomer is an aliphatic polyester based urethane diacrylate oligomer, a hard aliphatic urethane acrylate oligomer, an

aliphatic urethane containing bound silicone, or an aromatic urethane acrylate oligomer. See independent claim 1.

Applicants have also discovered a liquid stereolithography resin including a liquid stereolithography resin including a first urethane acrylate oligomer, a first acrylate monomer, a polymerization modifier, a second urethane acrylate oligomer different from the first urethane acrylate oligomer, and a stabilizer. See independent claim 56.

None of Clabburn, Ojeda, Ibata, Duecker, Lin, Johnson, nor Chawla, nor their combination, teaches or suggests a composition including a first urethane acrylate, a first acrylate monomer, a polymerization modifier, a second urethane acrylate oligomer different from the first urethane acrylate oligomer, and a stabilizer. Thus independent claims 1 and 56 and the claims that depend therefrom, are patentable over Clabburn and Ojeda.

None of Clabburn, Ojeda, Ibata, Duecker, Lin, Johnson, nor Chawla, describes a composition including a first urethane acrylate, a first acrylate monomer, a polymerization modifier, a second urethane acrylate oligomer different from the first urethane acrylate oligomer, and a stabilizer. Thus independent claims 1 and 56 and the claims that depend therefrom, are not anticipated by Clabburn, Ojeda, Ibata, Duecker, Lin, Johnson, or Chawla.

In addition, each of Clabburn, Ojeda, Ibata, Duecker, Lin, Johnson, and Chawla, alone or in combination, teach or suggest a composition including a first urethane acrylate, a first acrylate monomer, a polymerization modifier, a second urethane acrylate oligomer different from the first urethane acrylate oligomer, and a stabilizer. The Cited References do not teach or suggest a composition including a first urethane acrylate oligomer, a first acrylate monomer, a polymerization modifier, a second urethane acrylate oligomer different from the first urethane acrylate oligomer, and a stabilizer. For at least this reason, independent claims 1 and 56 and the claims that depend from it are patentable over Clabburn, Ojeda, Ibata, Duecker, Lin, Johnson, or Chawla combines with each of the Cited References.

Applicants respectfully request that the rejections under 35 U.S.C. §§ 102 and 103 be reconsidered and withdrawn.

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CONCLUSION

Applicants ask that all claims be allowed. Please apply any deposits or credits to Deposit Account No. 19-4293.

Respectfully submitted,

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Date



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